

**1-100.** (canceled)

**101.** A fluid handling cassette for use in a peritoneal dialysis system, the cassette comprising:

- a generally planar body having at least one pump chamber formed as a depression in a first side of the body and a plurality of flowpaths for a fluid that includes a channel, the body including a vacuum vent clearance depression formed adjacent the at least one pump chamber;
- a patient line port arranged for connection to a patient line, the patient line port being in fluid communication with the at least one pump chamber;
- a drain line port arranged for connection to a drain line, the drain line port being in fluid communication with the at least one pump chamber; and
- a flexible membrane attached to the first side of the body over the at least one pump chamber, a pump chamber portion of the membrane over the at least one pump chamber being arranged to be movable for movement of the fluid in the pump chamber, wherein the vacuum vent clearance depression prevents contact of the membrane with the body in an area located over the vacuum vent clearance depression and extending at least partially over the at least one pump chamber.

**102.** The cassette of claim **101**, wherein the vacuum vent clearance depression extends outwards from the at least one pump chamber.

**103.** A fluid handling cassette for use in a peritoneal dialysis system, the cassette comprising:

- a generally planar body having at least one pump chamber formed as a depression in a first side of the body and a plurality of flowpaths for a fluid that includes a channel, the body including a vacuum vent clearance depression formed adjacent the at least one pump chamber, and the at least one pump chamber including one or more spacer elements that extend from an inner wall of the depression;
- a patient line port arranged for connection to a patient line for delivery of a dialysate to a peritoneal cavity of a patient, the patient line port being in fluid communication with the at least one pump chamber; and
- a membrane attached to the first side of the body and comprising a pump chamber portion over the at least one pump chamber, being arranged to be movable for movement of the fluid in the at least one pump chamber, wherein the vacuum vent clearance depression prevents contact of the membrane with the body in an area located over the vacuum vent clearance depression and extending at least partially over the at least one pump chamber, wherein the one or more spacer elements help prevent contact of the membrane with an inner wall of the body in the at least one pump chamber when the pump chamber portion is moved into contact with the one or more spacer elements, and wherein the one or more spacer elements are arranged to minimize deformation of the membrane at edges of the one or more spacer elements when the membrane is forced against the one or more spacer elements.

**104.** A fluid handling cassette for use with a fluid handling system of a medical infusion device, the cassette comprising:

- a generally planar body having at least one pump chamber formed as a depression in a first side of the body and a

plurality of flowpaths for a fluid that includes a channel, the body including a vacuum vent clearance depression formed adjacent the at least one pump chamber;

- a patient line port arranged for connection to a patient line, the patient line port being in fluid communication with the at least one pump chamber;
- a drain line port arranged for connection to a drain line, the drain line port being in fluid communication with the at least one pump chamber;
- a plurality of solution line spikes being in fluid communication with the at least one pump chamber; and
- a flexible membrane attached to the first side of the body over the at least one pump chamber, a pump chamber portion of the membrane over the at least one pump chamber being arranged to be movable for movement of the fluid in the at least one pump chamber, wherein the vacuum vent clearance depression prevents contact of the membrane with the body in an area located over the vacuum vent clearance depression and extending at least partially over the at least one pump chamber.

**105.** The cassette of claim **104**, further comprising:

- a heater bag line port located at a first end of the body arranged for connection to a heater bag line, the heater bag line port being in fluid communication with the at least one pump chamber;

wherein the patient line port and drain line port are also located at the first end of the body, and the plurality of solution line spikes are located at a second end of the body opposite the first end.

**106.** The cassette of claim **105**, wherein the patient line, the drain line and the heater bag line are flexible and are respectively connected to the patient line port, the drain line port and the heater bag line port.

**107.** The cassette of claim **106**, wherein the patient line, the drain line and the heater bag line are arranged to be pinched by an occluder pinch head to occlude flow in the patient line, the drain line and the heater bag line.

**108.** The cassette of claim **105**, wherein the drain line port and the heater bag line port communicate with a common flowpath channel of the fluid handling cassette.

**109.** The cassette of claim **104**, wherein the plurality of solution line spikes communicate with a common flowpath channel of the fluid handling cassette.

**110.** The cassette of claim **104**, wherein the membrane includes a pump chamber portion that has a shape that generally conforms to a useable area of the depression of the at least one pump chamber in the body.

**111.** The cassette of claim **104**, wherein the at least one pump chamber formed as a depression comprises two pump chambers that are each formed as a depression in the body.

**112.** The cassette of claim **104**, wherein the at least one pump chamber includes one or more spacer elements that help prevent contact of the membrane with an inner wall of the body in the at least one pump chamber.

**113.** The cassette of claim **112**, wherein the one or more spacer elements are arranged to minimize deformation of the membrane at edges of the one or more spacer elements when the membrane is forced against the one or more spacer elements.

**114.** The cassette of claim **104**, wherein the vacuum vent clearance depression extends outwards from the at least one pump chamber.

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